Figure 1
X-Ray Crystal Structure of 1,4 -Bis(4-Pyridyl)Butadiyne)
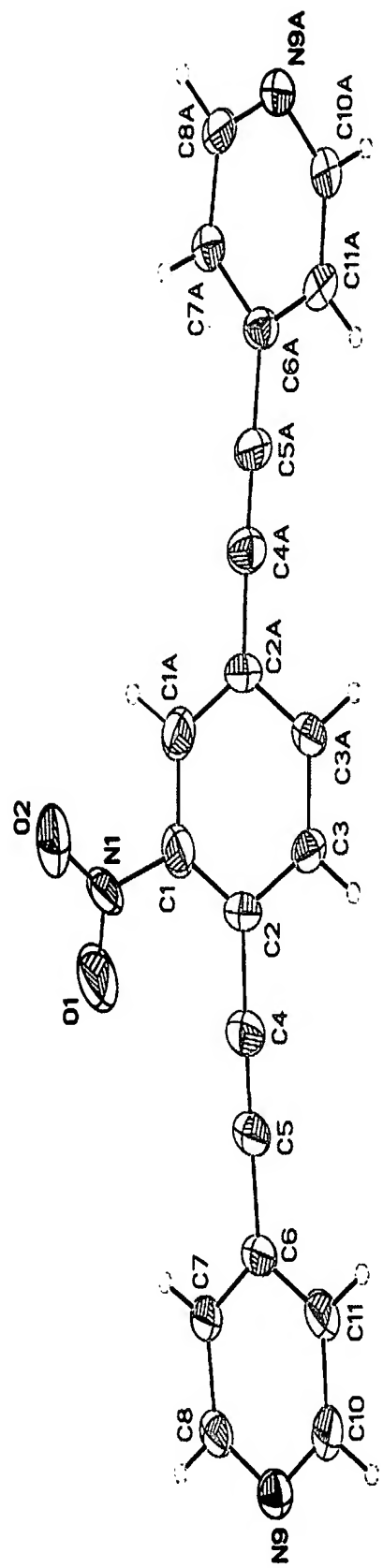
Figure 2

X-Ray Crystal Structure of 4-Ethynyl(Pyridine)-4'-Ethynylphenyl-5'-Nitro-1Pyridine

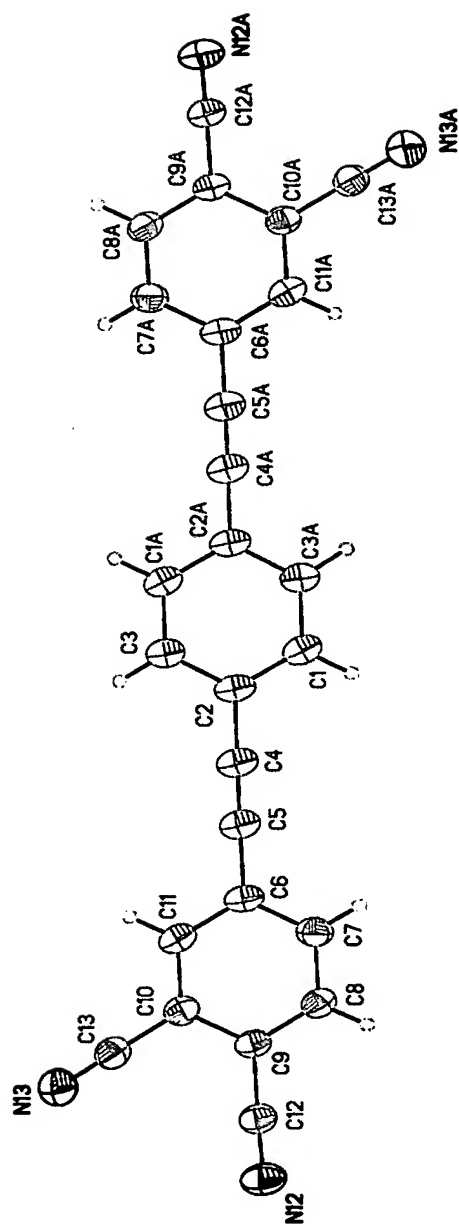Figure 3

X-Ray Crystal Structure of 4-Ethynyl (1, 2 – dicyanobenzene) –4'-Ethynylphenyl –1(4, 5 –dicyanobenzene)
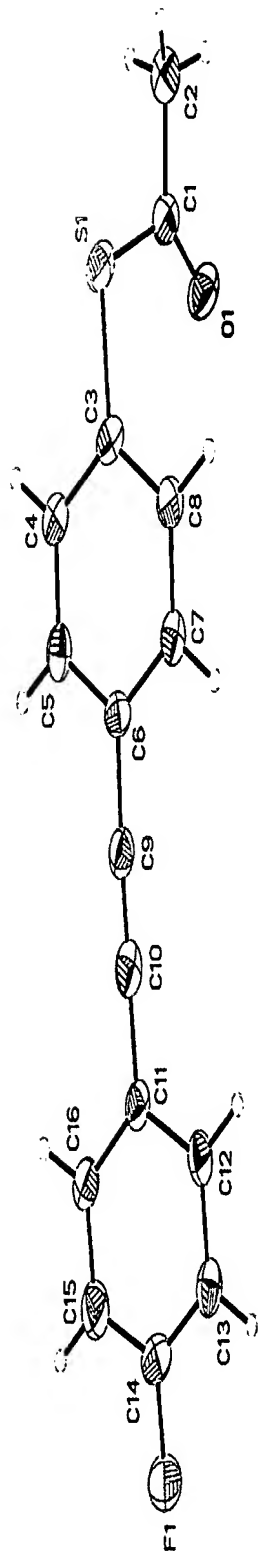
Figure 4
X-Ray Crystal Structure of 1-Thioacetyl-4(4'-Fluoro-1'- (Ethynyl)Phenyl)Benzene
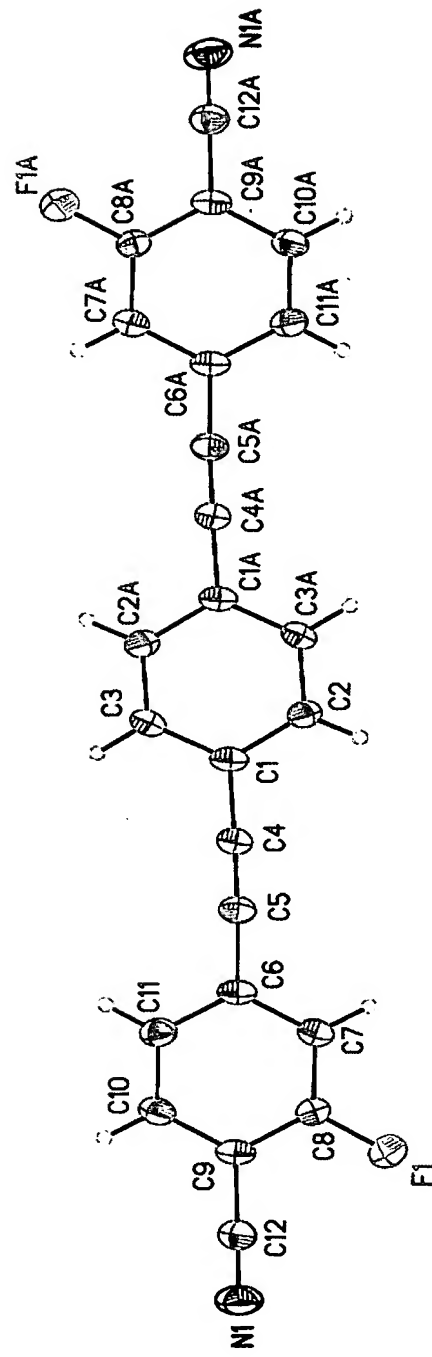
Figure 5

X-Ray Crystal Structure of 4-Ethynyl(2-Fluoro-Cyanobenzene)- 4'-Ethynylphenyl-1(2-Fluoro-Cyanobenzene)
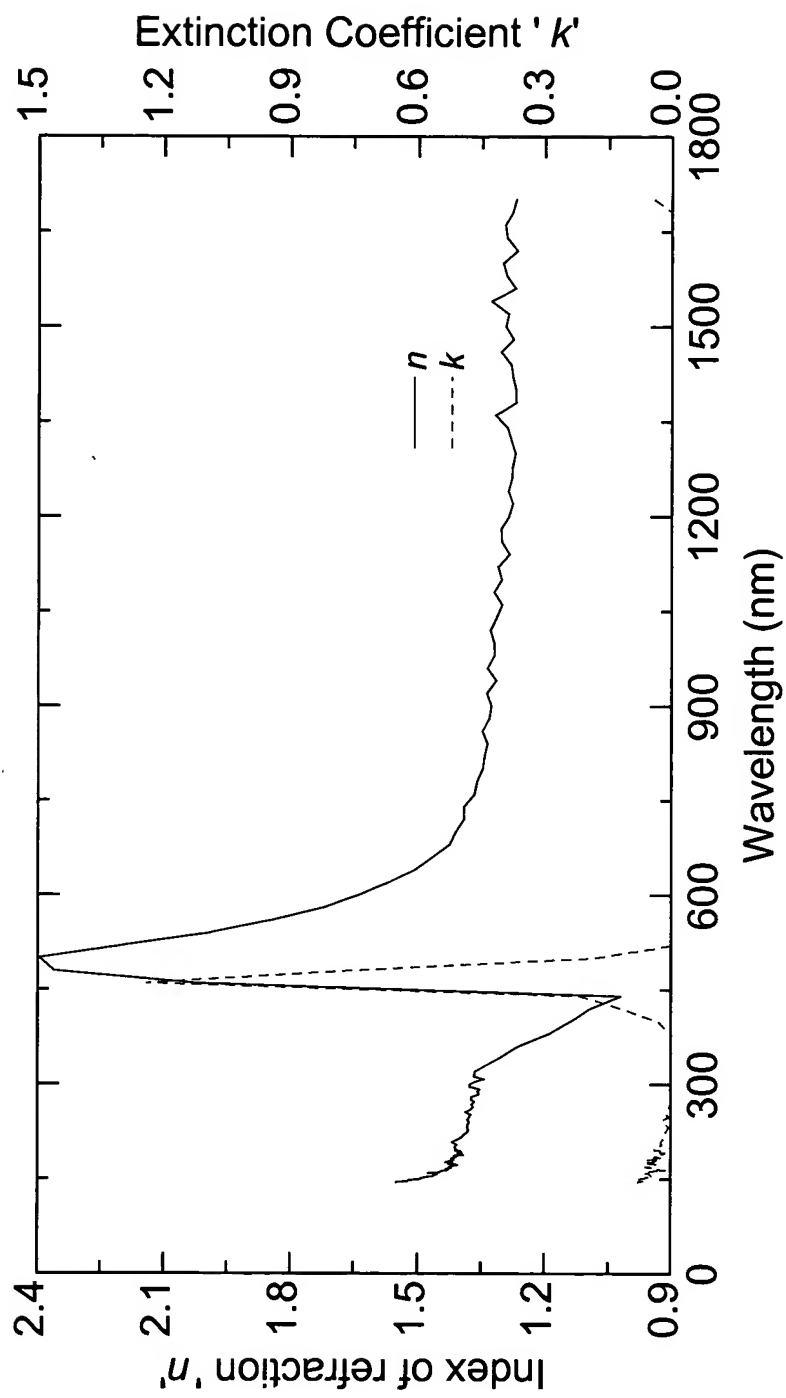
Figure 6

Index of refraction (n) and the extinction coefficient (k) versus wavelength lambda (λ) in units of nanometers for the self assembled molecules of Example 9, PETB.

Figure 7

Index of refraction (n) and the extinction coefficient (k) versus wavelength lambda (λ) in units of nanometers for the self assembled molecules of Example 10, pF-PETB.

Figure 8

Index of refraction (n) and the extinction coefficient (k) versus wavelength lambda (λ) in units of nanometers for the self assembled molecules of Example 11, 3N-PETB.
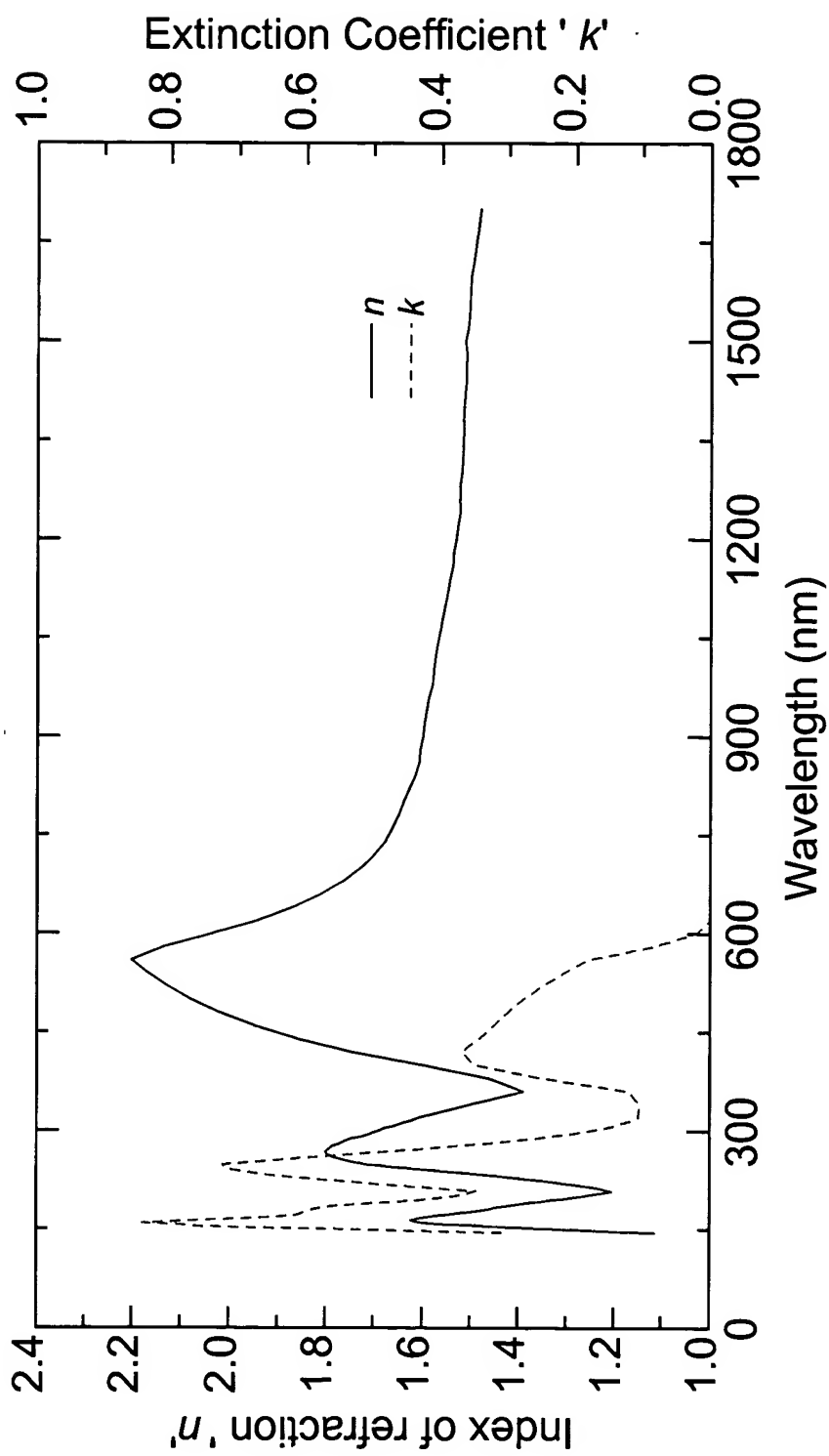
Figure 9

Index of refraction (n) and the extinction coefficient (k) versus wavelength lambda (λ) in units of nanometers for the self assembled molecules of Example 12, 3-PETB.
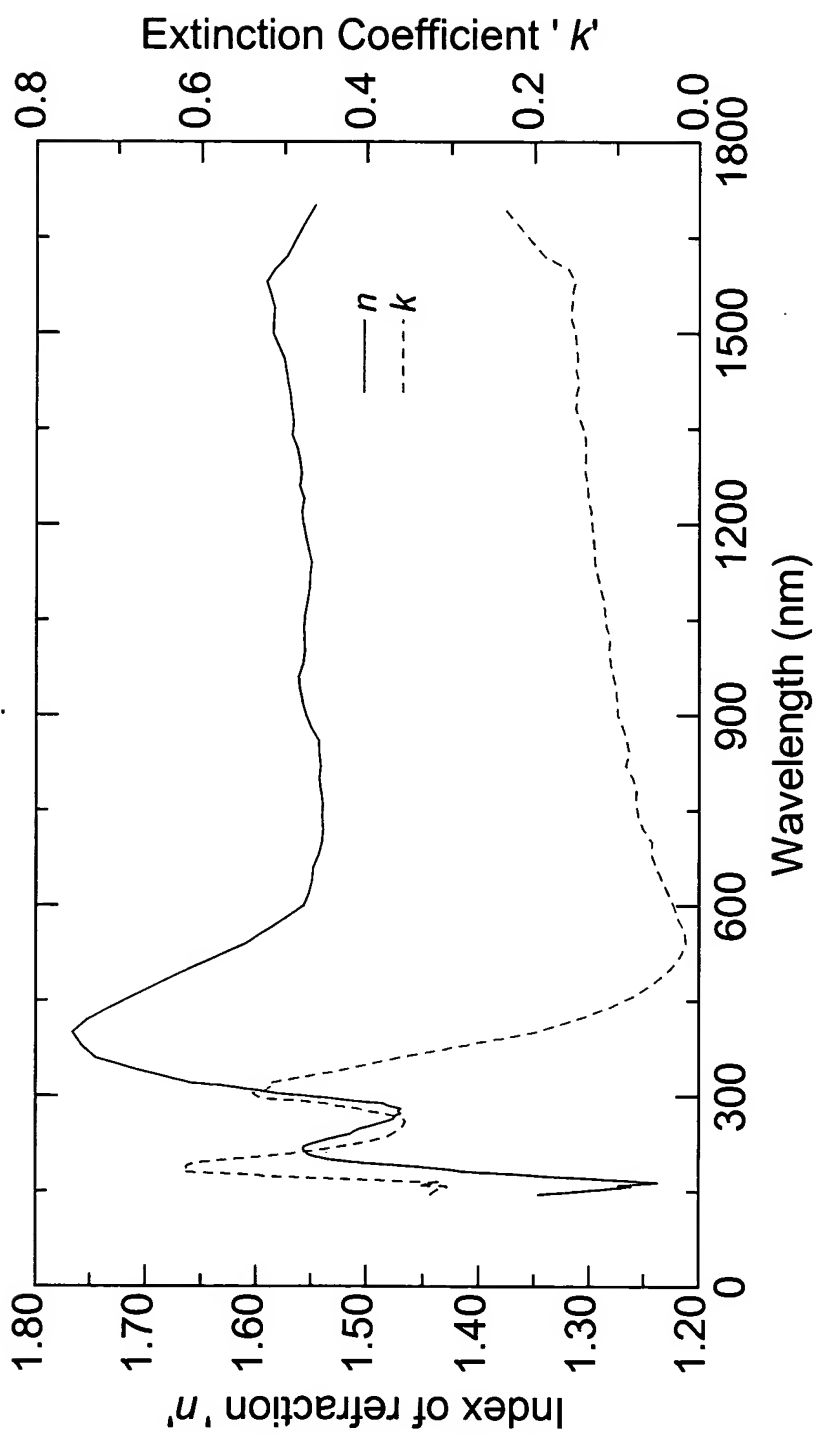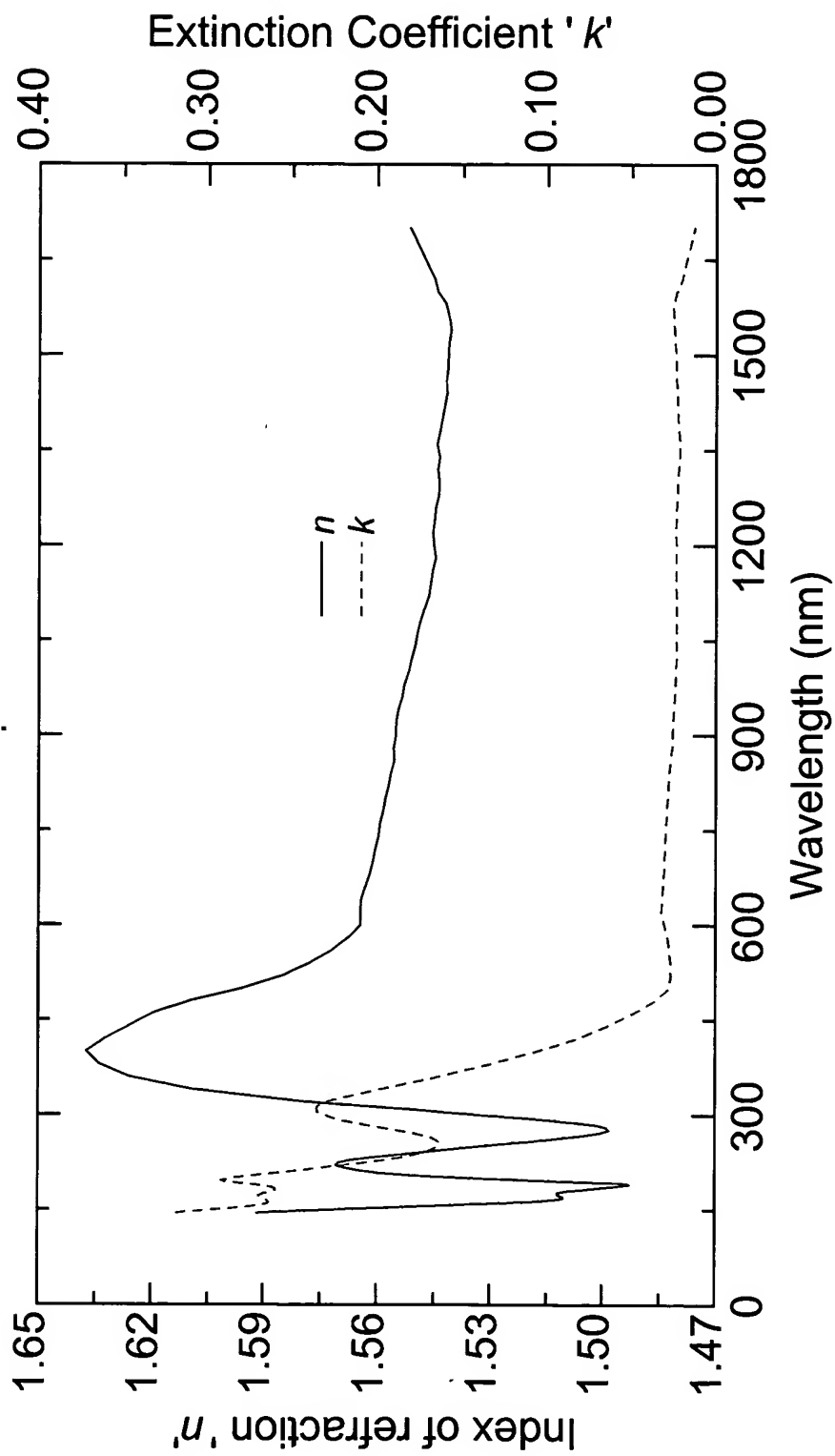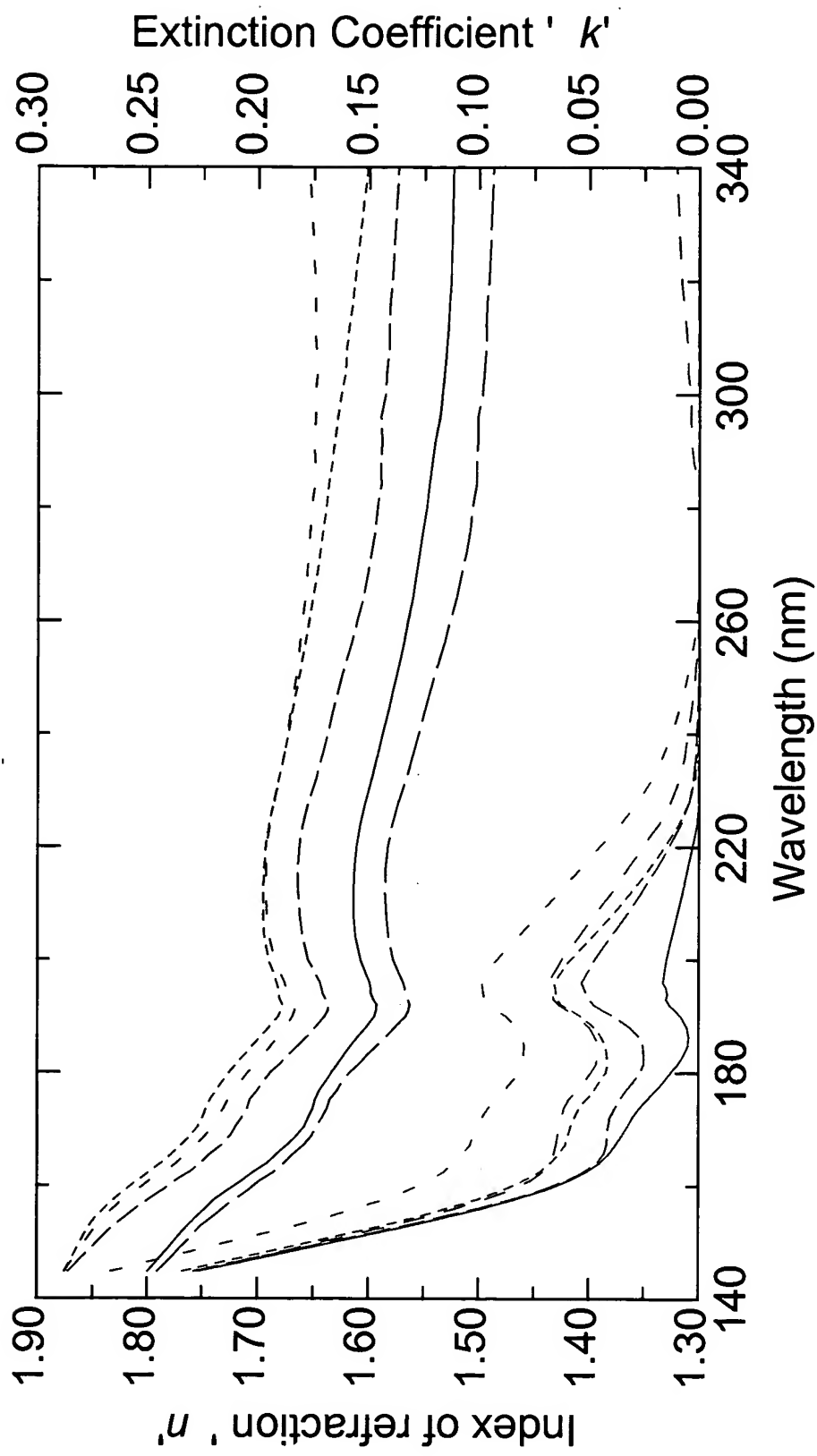
Figure 10

Index of refraction (n) and the extinction coefficient (k) versus wavelength lambda (λ) in units of nanometers the self assembled molecules of Example 13, 2F2CN3B.
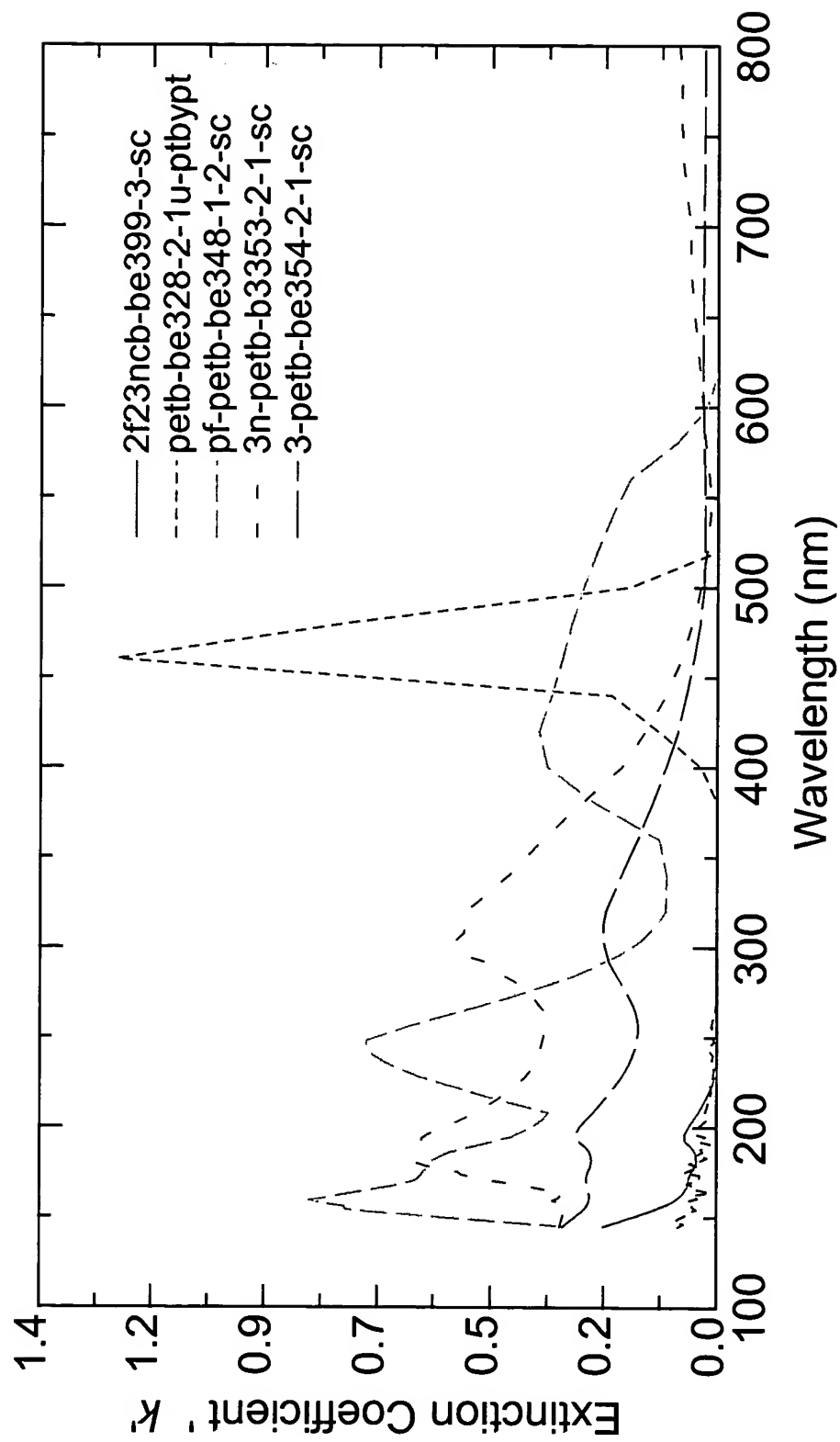
Figure 11

Index of refraction (n) and the extinction coefficient (k) versus wavelength lambda (λ) in units of nanometers for the self assembled molecules of examples 9, PETB, 10, Pf-PETB, 11, 3N-PETB, 12, 3-PRTB and 13, 2F2CN3B.